

Permit Conditions
Allied Waste Industries Arizona, Inc.
Southwest Regional Landfill
Permit Number: V97- 023
Date: June 16, 1999

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

1. **AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
No person shall discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or SIP Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
2. **CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4]
A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. No person shall circumvent the requirements concerning dilution of air contaminants by using more emission openings than is considered normal practice by the industry or activity in question.
3. **CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:** [County Rule 210 §§301.7, 302.1 e (1), 305.1(c)(1) & 305.1e]
Any application form, report, or compliance certification submitted pursuant to the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application as of the time of submittal. This certification and any other certification required pursuant to the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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4. COMPLIANCE:

A. COMPLIANCE REQUIRED:

- 1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only]
[County Rule 210 §§301.8 b 4 & 302.1 h (1)]
- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.
[County Rule 210 §302.1 h (2)]
- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.
[County Rule 210 §302.1 (h) (6)] [SIP Rule 220 §302.1]

Compliance with the RACT requirements of this Permit Condition for NO_x shall not be required if a waiver granted by the Administrator under Section 182 (f) of the Clean Air Act is in effect.

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1 d]

The Permittee shall file a semiannual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The semiannual certification shall be filed at the same time as the semiannual monitoring report required by the Specific Condition section of these Permit Conditions.

C. COMPLIANCE PLAN:

[County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the release date of the proposed conditions for this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become

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effective during the term of this permit on a timely basis. [federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only]

5. **CONFIDENTIALITY CLAIMS:** [County Rules 100 §402 and 200 §411]
Any records, reports or information obtained from any person pursuant to the County Rules or this Permit shall be available to the public, unless the person files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
- B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

A claim of confidentiality shall not excuse a person from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

A source that has submitted information with an application under a claim of confidentiality pursuant to ARS 49-487 and County Rule 200 shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. **CONTINGENT REQUIREMENTS:**

NOTE: This Permit Condition covers activities and processes addressed by the Clean Air Act which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

- A. **ACID RAIN:** [County Rule 210 §§302.1b(2) & 302.1f]
 - 1). Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated pursuant to Title IV of the CAA and incorporated pursuant to County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
 - 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds pursuant to Title IV of the CAA or the regulations promulgated thereunder and incorporated pursuant to County Rule 371.
 - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program and incorporated pursuant to County Rule 371, provided that such increases do not require a permit revision pursuant to any other applicable requirement.
 - b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
 - c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated pursuant to Title IV of the CAA.

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- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit pursuant to County Rule 371:
 - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.

B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8]
The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G]
If applicable, the Permittee shall follow the requirements of 40CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. **DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 §301.6]
Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

8. **EMERGENCY EPISODES:** [County Rule 600 §302] [SIP Rule 72 e, f & g]

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If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302

9. EMERGENCY PROVISIONS: [County Rule 100 §501]

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. The permitted source was at the time being properly operated;
- C. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer giving notice of the emergency and submitted notice of the emergency to the Control Officer by certified mail or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS: [County Rule 100 §502]

NOTES: This Permit Condition is based on a County Rule which has not been adopted into the State Implementation Plan and is therefore applicable only at the County level. There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions.

- A. Emissions in excess of an applicable emission limitation contained in the Rules or in these Permit Conditions shall constitute a violation. For all situations that constitute an emergency as described in Rule 100 §501, the affirmative defense and reporting requirements contained in Rule 100 §501 shall apply. In all other circumstances, it shall be an affirmative defense if the owner or operator of the source has complied with the reporting requirements of Rule 100 §502.3 and these Permit Conditions in a timely manner and has demonstrated all of the following:
 - 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process or the control equipment, resulted from unavoidable conditions during

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startup or shutdown, resulted from unavoidable conditions during an upset of operations, or that greater or more extended excess emissions would result unless scheduled maintenance is performed;

- 2) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- 3) Where repairs were required, such repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded and off-shift labor and overtime were utilized where practical to insure that such repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that such measures were impractical;
- 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- 5) All feasible steps were taken to minimize the impact of the excess emissions on potential violations of ambient air quality standards;
- 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- 7) During the period of excess emissions, there were no measured violations of the ambient air quality standards established in Rule 510 which could be attributed to the emitting source.

- B. It shall be the burden of the owner or operator of the source to demonstrate, through submission of the data and information required by Rule 100 §502 and these Permit Conditions that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of excess emissions.

- 11. FEES:** [County Rules 200 §409; 210 §302.1i; 210 §401]
The Permittee shall pay fees to the Control Officer pursuant to ARS 49-480(D) and County Rule 280.

- 12. MODELING:** [locally enforceable only] [County Rule 200 §407]
Where the Control Officer requires a person to perform air quality impact modeling, the modeling shall be performed in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

- 13. MONITORING / TESTING:**
The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order.
[County Rule 200 §309]

Except as otherwise specified in these Permit Conditions or by the Control Officer, required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions shall be conducted in

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accordance with County Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.
[County Rule 200 §§408 & County Rule 270]

Equivalent test methods and procedures may be used in lieu of those described in this paragraph if approved by the Control Officer
[County Rule 270 §402]

The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

- A. Sampling ports adequate for test methods applicable to such source.
- B. Safe sampling platform(s).
- C. Safe access to sampling platforms(s).
- D. Utilities for sampling and testing equipment.

[County Rule 270 §405]

14. PERMITS:

- A. BASIC: [County Rule 210 §302.1 h (3)]

This Permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

- B. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:
[County Rule 200 §§301 & 308]
[County Rule 210 §§301.4a, b, & c, and 400]

The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.

The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 §§303.1(a), 405.4, & 406.4]

The Control Officer may with reasonable cause require the applicant to provide additional information and may set a reasonable deadline for a response.
[County Rule 210 §301.4f]

No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

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C. POSTING:

Any person who has been granted a permit shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311]

If a Dust Control Plan, as required by Rule 310, has been approved as a part of this Permit, a copy of the latest approved Dust Control Plan must be posted in a conspicuous site at the worksite, within on-site equipment, in an on-site vehicle, or otherwise kept readily available on site at all times.

[County Rule 310 §402]

D. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310]
A person shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

E. RENEWAL: [County Rule 210 §§ 301 & 302]

The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.

[County Rule 210 §§301.2a and 301.4a, b, c, d, h]

All permit applications shall be filed in the manner and form prescribed by the Control Officer. To apply for a permit renewal, applicants shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

The Control Officer may with reasonable cause require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 § 301.4f]

If a timely and complete application for a permit renewal is submitted, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rules 200 §403.2 and 210 §§301.4f and 301.9]

F. REVISION / REOPENING / REVOCATION:

- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

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[County Rules 200 §402.1]

Any permit revision required pursuant to this paragraph shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term. [County Rules 200 §402.1a(1) & 210 §302.5, is locally enforceable only, and would apply if the permit is reopened and revised under this paragraph by the Control Officer.]

Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists. [40CFR 70.7(f)(2) and would apply if the permit is reopened and revised under this paragraph by the Administrator]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
[County Rule 200 §402.1]
 - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
[County Rule 200 §402.1]
 - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
[County Rule 200 §402.1]

Proceedings to reopen and issue a permit under subparagraphs a), b), or c) of this subsection shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) In addition, this permit shall be reopened by the Control Officer and any permit shall be revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.
[County Rule 210 §407.3]
- 4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.
[County Rule 210 §302.1 h (3)]

G. REVISION PURSUANT TO A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD: [locally enforceable only] [County Rule 210 §301.2c]
If the Permittee becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

H. REQUIREMENTS FOR A PERMIT:
Except as noted pursuant to the provisions in Sections 403 and 405 of County Rule 210,

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no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued pursuant to County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

No person shall commence any earth moving operation or any dust generating operation without meeting the requirements of and obtaining any and all Earth Moving Equipment Permits and Permits to Operate required by County Rule 200. The provisions of this section shall not apply:

- 1) During emergency, life threatening situations or in conjunction with any officially declared disaster or state of emergency;
- 2) To operations conducted by essential service utilities to provide electricity, natural gas, oil and gas transmission, cable television, telephone, water, and sewerage during service outages and emergency disruptions;
- 3) To non-routine or emergency maintenance of flood control channels and water retention basins.
- 4) To vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality and/or commercial acceptance. Such facilities and operations shall be exempted from the provisions of this section only if such testing is not feasible within enclosed facilities.

[County Rule 310 §302] [SIP Rule 310 §302]

The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rules 314 & 200 §306] [SIP Rule 314]

I. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1 h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

J. SEVERABILITY:

[County Rule 210 §302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

K. SCOPE:

The issuance of any permit or permit revision shall not relieve the owner or operator from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the owner or operator from obtaining a

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permit or permit revision required under the County Rules.

[County Rule 200 §308] [SIP Rule 22H]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.
- 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from a source pursuant to Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]
[County Rule 210 §407.2]

- L. TERM OF PERMIT: [County Rule 210 §§302.1a & 402]
This Permit shall remain in effect for no more than 5 years from the date of issuance.

- M. TRANSFER: [County Rule 200 §404]
Except as provided in ARS 49-429 and County Rule 200, this permit may be transferred to another person if the person who holds the permit gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures pursuant to County Rule 210.

15. RECORDKEEPING:

- A. RECORDS REQUIRED: [County Rule 100 §503]
The owner or operator of any air pollution source shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

- B. RETENTION OF RECORDS:
Information and records required by the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the owner or operator and submitted to the Control Officer shall be retained by the owner or operator for five years after the date on which the pertinent report is submitted.
[County Rule 100 §506]

Records of all required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit.
[County Rule 210 §§302.1 d (2) and 305.1 b (2)]

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- C. MONITORING RECORDS: [County Rule 210 §§302.1 d (1) and 305.1 b (1)]
Records of any monitoring required by this Permit shall include the following:
- 1) The date, place as defined in the permit, and time of sampling or measurements;
 - 2) The date(s) analyses were performed;
 - 3) The company or entity that performed the analyses;
 - 4) The analytical techniques or methods used;
 - 5) The results of such analyses; and
 - 6) The operating conditions as existing at the time of sampling or measurement
- D. RIGHT OF INSPECTION OF RECORDS: [County Rule 100 §106]
When the Control Officer has reasonable cause to believe that any person has violated or is in violation of any provision of County Rule 100 or any County Rule adopted pursuant to County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that such person produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted pursuant to County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

- A. ANNUAL EMISSION INVENTORY QUESTIONNAIRE: [County Rule 100 §507]
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30 or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants pursuant to Arizona Revised Statutes (ARS) §49-476.01, ARS §49-480.03 and ARS §49-480.04.

- B. DATA REPORTING: [County Rule 100 §504]
When requested by the Control Officer, a person shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The owner or operator of a source requested to submit information pursuant to this Permit may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

- C. DEVIATION REPORTING: [County Rules 100 §501.3d & 210 §§302.1 e & 305.1(c)]
The Permittee shall promptly report deviations from permit requirements, including

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those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The report shall be submitted to the Control Officer by certified mail, facsimile, or hand delivery within two working days of the knowledge of the deviation and shall contain a description of the probable cause of such deviations, and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

D. EMERGENCY REPORTING: [County Rule 100 §501]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of Rule 100 §501. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of Rule 210 to file a deviation report)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submitted notice of the emergency to the Control Officer by certified mail or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §505]

Upon request of the Control Officer and as directed by the Control Officer, the owner or operator of any source which emits or may emit oxides of nitrogen (NO_x) or volatile organic compounds (VOC) shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and VOC from that source. At a minimum the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually. The Control Officer may waive this requirement for the owner or operator of any source which emits less than 25 tons per year of oxides of nitrogen or volatile organic compounds with an approved emission inventory for sources based on the USEPA's Compilation of Air Pollutant Emission Factors (AP-42) or other methodologies approved by the Administrator.

F. EXCESS EMISSIONS REPORTING: [locally enforceable only] [County Rule 100 §502]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

1) Excess emissions shall be reported as follows:

a) The Permittee shall report to the Control Officer any emissions in excess of

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the limits established either by the Rules or these Permit Conditions. The report shall be in two parts as specified below:

- (1) Notification by telephone or facsimile within 24 hours of the time when the owner or operator first learned of the occurrence of excess emissions including all available information from paragraph F. 1) b) below of this Permit Condition.
 - (2) Detailed written notification within 72 hours of the telephone notification pursuant to paragraph F. 1) a) (1) above of this Permit Condition.
- b) The excess emissions report shall contain the following information:
- (1) The identity of each stack or other emission point where the excess emissions occurred.
 - (2) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) The time and duration or expected duration of the excess emissions.
 - (4) The identity of the equipment from which the excess emissions emanated.
 - (5) The nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.
 - (7) The steps that were or are being taken to limit the excess emissions. If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the Permit procedures.
- 2) In the case of continuous or recurring excess emissions, the notification requirements of this section of this rule shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to Rule 100 §502.3(a)(2).

G. OTHER REPORTING: [County Rule 210 §302.1 h (5)]

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

[County Rules 100 §105 and 210 §305.1f]

The Control Officer during reasonable hours, for the purpose of enforcing and administering County Rules, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense pursuant to ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

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The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;
 - B. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;
 - C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
 - D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
 - E. To record any inspection by use of written, electronic, magnetic, and photographic media.
- [Locally enforceable only]

SPECIFIC CONDITIONS

18.ALLOWABLE EMISSION LIMITATIONS

- A. The Permittee shall not allow emissions from the facility of Volatile Organic Compounds (VOCs), Nitrogen Oxides (NOx), or Sulfur Dioxide (SO₂) as calculated in accordance with Permit Conditions 22.B, 22.G, and 22.H to be emitted into the atmosphere in excess of either 150 pounds per day nor more than 25 tons per year. In addition, the Permittee shall not allow facility emissions of Fine Particulate Matter (PM₁₀), as calculated in accordance with Permit Condition 22.H, to be emitted into the atmosphere in excess of either 85 pounds per day or 15 tons per year. Furthermore, the Permittee shall not allow facility emissions of Carbon Monoxide (CO), as calculated in accordance with Permit Condition 22.H, to be emitted into the atmosphere in excess of either 550 pounds per day or 100 tons per year.

[County Requirement - County Rule 241] [Locally Enforceable only]

B. Opacity

- 1) The Permittee shall not cause, suffer, allow, or engage in any dust generating operation at the facility that causes fugitive dust in excess of 20 percent opacity. The provisions of this permit condition shall not apply when the average wind speed is greater than 25 miles per hour, provided that all reasonably available control measures contained in the approved Dust Control Plan shall remain in effect.

[Federal Requirement (SIP Approved) - County Rule 310]

- 2) The Permittee shall not discharge into the ambient air from any source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity. Visible emissions exceeding the opacity standards for short periods of time resulting from start-up, shut-down, soot blowing, or unavoidable combustion irregularities that do not exceed three minutes in length shall not constitute a violation provided that the Control Officer finds that adequate control technology has been applied. Unavoidable combustion irregularities that exceed three minutes shall not constitute a violation of this Permit Condition providing the owner or operator demonstrates to the Control Officer's satisfaction that an emergency exists in accordance with Regulation I, Rule 100, Section 501.

[County Requirement - County Rule 300] [Locally Enforceable only]

- 3) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[Federal Requirement - SIP Rule 30]

- C. The Permittee shall not emit hydrogen sulfide (H₂S) from the facility in such a manner or amount that the concentration of such emissions in the ambient air at any place beyond the property line exceeds 0.03 parts per million by volume (ppmv) for any averaging period of 30 minutes or more.

[County Requirement - County Rule 320 §304]

D.

- 1) The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 § 300]

- 2) Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 § 302]

19. OPERATIONAL REQUIREMENTS

- A. The Permittee shall not accept waste that will cause the VOC emissions from the facility (calculated in accordance with Permit Conditions 22.B, 22.G, and 22.H) to exceed 25 tons per year prior to application of Best Available Control Technology (BACT) as approved by the Division. If the VOC emissions calculations performed in accordance with Permit Conditions 22.B, 22.G, and 22.H indicate that VOC emissions from the facility will exceed 25 tons per year, the Permittee shall cease its waste acceptance until a Division-approved landfill gas collection and control system meeting the BACT requirements of Maricopa County Rule 241 is installed and operational.

[County Requirement - County Rule 241] [Locally Enforceable only]

B. Open Fugitive Dust Sources

- 1) The Permittee shall maintain at all times during the lifetime of the project a Dust Control Plan approved in writing by the Control Officer for earth-moving operations that disturb a total surface area of 0.10 acre or more.
- 2) The Permittee shall revise the Dust Control Plan as necessary in accordance with the requirements of Permit Conditions 19.B.5 and 20.A.
- 3) The Permittee shall apply all necessary measures to comply with the applicable opacity limits, including but not limited to all Reasonably Available Control Measures (RACMs) for controlling dust emissions in all areas of the landfill as set forth in the Permittee's most recently approved Dust Control Plan.
- 4) The Permittee shall not disturb or remove soil, natural ground cover, or vegetation without first implementing reasonably available control measures to effectively prevent or minimize fugitive dust. Furthermore, within eight months of the termination of dust generating activities on a work site, disturbed surface areas shall be stabilized through the application of reasonably available control measures of a permanent nature.
- 5) RACMs shall consist of at least one measure for each of the following categories:
 - a) EARTHMOVING

- (1) Grading / Demolition / Landscaping / Weed Control:
 - (a) Conduct watering as necessary to prevent or minimize visible emissions
 - (b) Prewet site to depth of cuts
 - (c) Increase watering frequency during high wind conditions until there is no evidence of wind blown dust (contingency only, not to be used as a primary RACM)
 - (d) Cease operations (contingency only, not to be used as a primary RACM)
- (2) Trenching / Screening / Backfilling:
 - (a) Mist dust cloud resulting from trenching
 - (b) Mist material after it drops from screen
 - (c) Water truck or large hose dedicated to trenching and backfilling equipment
 - (d) Increase watering frequency during high wind conditions until there is no evidence of wind blown dust (contingency only, not to be used as a primary RACM)
 - (e) Cease operations (contingency only, not to be used as a primary RACM)

b) SITE STABILIZATION / DISTURBED SURFACE AREA

- (1) Temporary Stabilization:
 - (a) Apply water to all areas at least twice a day until a crusted surface has formed (including weekend and holidays if the surface is disturbed)
 - (b) Apply chemical stabilizers
 - (c) Install wind fences/barriers/form berms (in addition to the above)
- (2) When active operations will not occur for more than 15 days:
 - (a) Apply dust suppressants to all disturbed areas to maintain stabilization
 - (b) Apply water to all inactive disturbed areas at least twice a day until a crusted surface has formed
 - (c) Install temporary coverings/enclosures (in addition to one of the above)
- (3) Final Stabilization: Within eight months after active operations have ceased:
 - (a) Pave the affected area
 - (b) Physical stabilization with gravel/recycled asphalt
 - (c) Physical stabilization with vegetation

(4) Open Storage Piles:

- (a) Apply chemical stabilizers
- (b) Apply water to the surface area of all open storage piles on a daily basis until a crusted surface has formed
- (c) Install temporary coverings/enclosures (in addition to one of the above)

Prior to and during any high wind event, control measures must continue to be implemented or increased as necessary to effectively minimize wind blown dust.

c) MATERIAL HANDLING / HAULING

(1) Material Loading (other than waste):

- (a) Pre-wet material prior to handling or loading
- (b) Water/mist while loading to prevent or minimize visible emissions

- (2) Hauling: All haul trucks carrying bulk materials must be effectively covered with a tarp or other suitable enclosure

d) ROADWAYS / ACCESS POINTS

(1) Unpaved Haul / Access Roads / Equipment Paths:

- (a) Stabilize with gravel/recycled asphalt
- (b) Apply chemical dust suppressants to maintain surface stabilization
- (c) Water all surfaces as needed to prevent or minimize visible emissions
- (d) Restrict vehicle speed to 15 MPH (in addition to the above)

2) Access Points: Vacuum or wet broom all visible track-out on a daily basis in addition to any of the following

- (a) Install a stabilized construction entrance/coarse gravel pad - required on all sites larger than five acres or if there will be any material hauling on or off site
- (b) Install a wheel washer
- (c) Limit, restrict, reroute motor vehicle access

The Permittee may develop and submit for Control Officer approval alternative dust control measures and a revised dust control plan designed to achieve equal or greater levels of dust control as compared to the measures required by this Permit Condition and the approved dust control plan. If approved by the Control Officer, such control measures and dust control plan may be used in place of the control measures required by this Permit Condition, as determined by the Control Officer.

[County Requirement County Rules 300, 310] [Federal Requirement (SIP Approved)]

C. Cold Solvent Cleaner

- 1) The Permittee shall equip and operate any solvent degreaser/cleaner according with the applicable requirements of the County Rule 331 (Locally Enforceable only), SIP Rule 331 and SIP Rule 34:

D. Stationary Internal Combustion Engines

The Permittee shall not operate the standby generator engine more than 500 hours per year for routine testing and maintenance. Other than for routine testing and maintenance, the Permittee shall use this engine only for power generation when normal power line service fails.

[County Requirement - County Rule 200] [Locally Enforceable only]

E. Gasoline Storage Tank

- 1) The Permittee shall limit gasoline throughput to less than 120,000 gallons per year.

[Federal Requirement (SIP Approved) - County Rule 353 §§ 303.2]

- 2) The Permittee shall not allow gasoline to be transferred into any storage tank with a storage capacity of more than 250 gallons unless the storage tank is equipped with a submerged fill pipe, the end of which is totally submerged when the liquid in the tank is six inches from the bottom of the tank.

[Federal Requirement (SIP Approved) - County Rule 353 §§ 301, 303.2]

F. Material Containment

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The Permittee shall apply a minimum of six inches of daily cover material (or other ADEQ-approved method) to the active portions of the landfill and, when necessary to meet the odor control requirements of this Permit, treatment with lime or other approved control chemicals or processes to limit odorous contaminants from the facility's equipment or operations.

[County Requirement - County Rule 320] [Federal Requirement - SIP Rule 32]

G. Asbestos Disposal

The Permittee shall apply a minimum of six inches of compacted daily cover material (or other ADEQ-approved material) to the active portions of the landfill where asbestos-containing waste material, as defined by 40 CFR 61.141 and subject to the requirements of 40 CFR 61.154, is placed.

[County Requirement - County Rule 370] [Federal Requirement - 40 CFR 61.154]

H. Contaminated Soil

Immediately after delivery of contaminated soil to the landfill, the Permittee shall cover the soil with a minimum of six inches of compacted daily cover material, compacted municipal solid waste, or other ADEQ-approved material. Contaminated soil is defined as soil that contains more than 100 ppmw of any organic material having a true vapor pressure of 1.5 psia (77.5 mm Hg) or greater if tested by EPA Reference Method 80-15AZ or any other applicable and EPA approved testing procedure.

[County Requirement - County Rule 210] [Locally Enforceable only]

20. TESTING REQUIREMENTS

A. Opacity and Fugitive Dust

- 1) If operated more than 10 hours a week, The Permittee shall demonstrate compliance with the opacity requirements for the standby generator engine and the water pump engine by taking a visual emissions (VE) reading of the stack emissions of each operating engine once a week using EPA Reference Method 22. With the exception of startup and shutdown periods as defined in County Rule 300, if emissions are visible from any of these units while conducting a Method 22 reading, the Permittee shall obtain an opacity reading

conducted in accordance with EPA Reference Method 9 by an individual who is certified at that time as meeting the training and testing requirements as set forth in EPA Reference Method 9. This Method 9 reading shall be taken within three (3) days of the observation of visible emission. If the problem is corrected before three days have passed, and no emissions are visible, the Permittee shall record in a written log the event, date, time, conditions, and any corrective actions taken and shall not be required to conduct the Method 9 reading. If a Method 9 reading is required to be taken by this Permit Condition because of the presence of visible emissions, the Permittee shall have subsequent Method 9 readings taken weekly if operated until no visible emissions are observed.

[County Requirement - County Rule 300] [Federal Requirement - SIP Rule 30]

- 2) Compliance with the approved Dust Control Plan is deemed to be compliance with the requirements of Permit Condition 19.B.4 to control fugitive dust from disturbed surface areas. Additionally, compliance with the approved Dust Control Plan is deemed to be compliance with the opacity limitations for fugitive emissions in Permit Condition 18.B unless an exceedance of the standard is documented by a representative of either the Control Officer or the USEPA who is a certified VE reader. If an exceedance of the applicable opacity limitation is observed by a representative of either the Control Officer or the USEPA who is a certified VE reader at the time of the reading, the Permittee shall revise the Dust Control Plan to address the conditions that caused the observed exceedance and shall submit the revised Dust Control Plan to the Division: Attn: Dust Control Unit for approval within three days of being notified of the observed exceedance.

[Federal Requirement (SIP Approved) - County Rule 310]

- 3) For purposes of these Permit Conditions, a certified VE reader shall be an individual who, at the time the reading is taken, is certified by the Arizona Department of Environmental Quality (ADEQ) or their qualified contractor, as meeting the training and testing requirements as specified in EPA Reference Method 9.

B. Odor

If the Division or the Permittee logs more than three off-site odor complaints pursuant to Permit Condition 21.C during any four consecutive

weeks, the Permittee shall conduct property line monitoring for H₂S within 48 hours of receiving the third complaint or within 48 hours of being notified of third complaint by the Division. The Permittee shall notify the Division, Attn: Emission Testing Supervisor, by telephone or in writing at least 24 hours in advance of conducting the required monitoring.

The monitoring shall be performed using a Jerome 631-X (or equivalent approved by the Division) portable hydrogen sulfide gas analyzer with the capability to detect H₂S at concentrations in the parts per billion by volume (ppbv) range. The analyzer shall be calibrated and operated in accordance with the manufacturer's operating instruction book.

Monitoring shall be conducted at a minimum of 12 locations of equal spacing along the property line of the landfill (approximately every 1/2 mile) and shall be collected from between three and six feet above the ground surface. The monitoring period for each location shall be a period of ten minutes and the period shall begin as soon as possible after the tester arrives at the sampling location.

- 1) If odors are detectable when the tester arrives at a monitoring location, three readings shall be taken at roughly five minute intervals.
- 2) If no odors are detectable when the tester arrives at a monitoring location, the tester shall not immediately begin to take readings.
 - a) If odors become noticeable during the ten-minute monitoring period, the tester shall take three readings that are evenly spaced over the remainder of the ten-minute monitoring period.
 - b) If no odors are detectable during the first nine minutes of the sampling period, then the three required readings shall be taken during the final minute of the monitoring period.

If the property line monitoring shows an average H₂S concentration of 0.03 ppmv or higher at any of the monitoring locations, the Permittee shall implement a plan to control the H₂S emissions within seven calendar days. Upon implementation of the odor control plan, the Permittee shall monitor property line concentrations weekly until three weeks of data indicate the H₂S emissions have been controlled to 0.03 ppmv or less. The Permittee shall submit to the Division, Attn: Title V Compliance Supervisor, a report of complaints and of actions taken to implement the odor control plan within 14 calendar days of receiving the complaints.

The Control Officer reserves the right to require additional monitoring or testing for odoriferous compounds that might reasonably be expected to be emitted from the landfill.

[County Requirement - County Rule 320] [Federal Requirement - SIP
Rule 32]

C. Tier 2 Testing

- 1) The Permittee may (as an option) conduct Tier 2 testing in accordance with the requirements of 40 CFR 60.754 to establish a site-specific landfill gas VOC concentration (C_{VOC}) and recalculate the VOC emissions using the AP-42 calculation procedure (or other calculation method pre-approved in writing by the Division).

[County Requirement - County Rule 241] [Locally Enforceable only]

- 2) The Permittee may (as an option) conduct Tier 2 testing in accordance with the requirements of 40 CFR 60.754 to establish a site-specific landfill gas Nonmethane Organic Compound (NMOC) concentration (C_{NMOC}) and recalculate the NMOC emissions using the NSPS calculation procedure.

[County Requirement - County Rule 360] [Federal Requirement - 40
CFR 60.754]

- 3) At least 90 days prior to undertaking the Tier 2 testing program, the applicant shall submit a proposed test protocol to the Division, Attn: Emission Testing Supervisor, for approval.
- 4) Within 60 days following the completion of the Tier 2 testing program, the Permittee shall submit to the Division, Attn: Emission Testing Supervisor, a test report that presents the results of the testing, the proposed site-specific values for C_{NMOC} and C_{VOC} , and the test data and calculations supporting the proposed site-specific values.

[County Requirement - County Rule 241] [Locally Enforceable only]

D. Tier 3 Testing

- 1) The Permittee may (as an option) determine the site-specific methane generation rate constant (k) using EPA Reference Method 2E and recalculate the VOC emissions using the approach described in AP-42 (or other calculation method pre-approved in writing by the Division).

[County Requirement - County Rule 241] [Locally Enforceable only]

- 2) The Permittee may (as an option) determine the site-specific methane generation rate constant (k) using EPA Reference Method 2E and

recalculate the NMOC emissions using the Tier 3 approach described in 40 CFR 60.754.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.754]

- 3) At least 90 days prior to undertaking the Tier 3 testing program, the applicant shall submit a proposed test protocol and testing fees to the Division, Attn: Emission Testing Supervisor, for approval.
[County Requirement - County Rule 270] [Locally Enforceable only]
- 4) Within 90 days following the completion of the Tier 3 testing program, the Permittee shall submit to the Division, Attn: Emission Testing Supervisor, a test report that presents the results of the testing, the proposed site-specific k value, and the test data and calculations supporting the proposed site-specific value.
[County Requirement - County Rule 210] [Locally Enforceable only]

E. Cold Solvent Cleaner

If testing is required by the Control Officer, the applicable testing procedures contained in County Rule 331 (Locally Enforceable only) and SIP Rule 331 shall be used.

[Federal Requirement (SIP Approved) - County Rule 331 § 502]
[County Rule 331]

21. MONITORING AND RECORD KEEPING REQUIREMENTS

- A. The Permittee shall keep a daily written log recording the actual implementation of measures used to comply with the opacity limits, including Reasonably Available Control Measures (RACM) including, but not limited to, quantity of water or other dust suppressants used and location of applications.

[Federal Requirement (SIP Approved) - County Rule 310]

- B. The Permittee shall maintain daily records of the quantities of daily cover and/or odor control chemicals applied to the landfill. These records shall indicate the type of daily cover applied (e.g., soil, synthetic, other), the quantity applied (e.g., volume, square feet of application, or other units describing application), and the location of the application (e.g., cell number).

[County Requirement - County Rule 320] [Federal Requirement - SIP
Rule 32]

- C. The Permittee shall maintain a log of odor complaints from any residence or workplace located beyond the Permittee's property line. The Permittee shall also retain the records of all property line odor monitoring that is conducted at the landfill. The records shall contain the results of all of the H₂S sampling including the location, time each sample was taken, measured H₂S or other odoriferous compound concentrations, whether any noticeable odors were present, the general direction and estimated speed of the wind at the time the readings were taken, and any appropriate comments.

[County Requirement - County Rule 320] [Federal Requirement - SIP
Rule 32]

- D. The Permittee shall maintain records showing compliance with the requirements of Permit Conditions 19.F, and 19.G regarding daily application of cover material. These records shall include the area and quantity of cover material placed over the portion of the landfill where the asbestos-containing waste material, as defined by 40 CFR 61.141, is disposed. The Permittee shall maintain records of the location, depth, area, and quantity (cubic yards) of asbestos-containing waste material, that is subject to the requirements of 40 CFR 61.154, on a map or diagram of the disposal area until landfill closure.

The Permittee shall maintain records showing compliance with Permit Conditions 19.H. These records shall include date of delivery of the contaminated soil and actions taken to ensure immediate coverage of the contaminated soil.

[County Requirement - County Rule 370] [Federal Requirement - 40
CFR 61.154]

- E. The Permittee shall monitor and record VOC, NO_x, CO, PM₁₀, SO₂, and NMOC emissions as described in Permit Conditions 22.B, 22.F, and 22.G.

[County Requirement - County Rules 241 and 360] [Federal Requirement -
40 CFR 60.754]

- F. Cold Solvent Cleaner

- 1) Maintain a current list of solvents; state the VOC content of each in pounds per gallons or grams per liter. The VOC content of solvents

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and any liquids used as cleaning or degreasing agents shall be stated with water and non-precursors included.

- 2) Maintain monthly records showing the type and amount of each make up solvent added and any other VOC-containing materials used.
- 3) Perform and record weekly visual inspections of all cold degreasing equipment to verify compliance with these Permit Conditions. Record observed problems if any and corrective actions.

[Federal Requirement (SIP Approved) - County Rule 331]

G. Stationary Internal Combustion Engines

The Permittee shall keep accurate records of all hours of operation and reason for operation for the standby generator engine and the water pump engine to monitor for compliance with operational limitations.

[County Requirement - County Rule 210] [Locally Enforceable only]

H. Gasoline Storage Tank

The Permittee shall maintain records showing the quantity of all gasoline delivered to the facility. The total received each month and 12 month rolling total shall be recorded. The Permittee shall conduct and record an inspection each time the submerged fill pipe is reinstalled to monitor compliance with the fill pipe length requirements of these Permit Conditions. The Permittee shall keep records of each fill pipe removal showing the date of replacement and the date and result of the follow up inspection required by these Permit Conditions.

[Federal Requirement (SIP Approved) - County Rule 353 § 502]

- I. The Permittee shall log the information regarding opacity readings conducted in accordance with EPA Reference Method 22 and Method 9. This information should include the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information as required by the protocol for EPA Reference Method 9.

22. REPORTING REQUIREMENTS

A. Asbestos Disposal

- 1) The Permittee shall notify USEPA and the Division, Attn: Asbestos Coordinator, within 90 days of its initial acceptance of asbestos-containing waste material, as defined by 40 CFR 61.141 and subject to the requirements of 40 CFR 61.154.
- 2) The Permittee shall report in writing, by the following workday, the presence of a significant amount of improperly enclosed or uncovered asbestos containing waste material that is subject to the requirements of 40 CFR 61.154. The report shall be filed with the Division, Attn: Asbestos Coordinator, and the local, State, or USEPA Regional office responsible for administering the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) program for the waste generator (identified in the waste shipment record) if different from the Division. The report shall include a copy of the waste shipment record.
- 3) If the Permittee discovers any discrepancies between the quantity of waste designated on the waste shipment records and the quantity actually received that cannot be reconciled within 15 days, the Permittee shall immediately report in writing to the Division, Attn: Asbestos Coordinator, and the local, State, or USEPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record) if different from the Division. The report shall describe the discrepancy and attempts to reconcile it, and shall include a copy of the waste shipment record.
- 4) The Permittee shall comply with the requirements of Rule 370 and 40 CFR 61.151 regarding landfill closure.

[County Requirement - County Rule 370] [Federal Requirement - 40 CFR 61.154]

B. Landfill NMOC and VOC Emissions

- 1) The Permittee shall annually calculate and report the NMOC emissions from the landfill to the USEPA and the Division using the NSPS Tier 1 procedures in 40 CFR 60.754 using NSPS default values for the methane generation rate constant (k), the methane generation potential (L_0), and the landfill gas NMOC concentration (C_{NMOC}) in

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effect at the time the report is prepared. The reports shall be prepared in accordance with the requirements of 40 CFR 757(b). The Permittee shall annually submit a copy of the NMOCs emission report to the USEPA and the Division, Attn: Large Sources Compliance Supervisor, within 30 days of the end of each calendar year starting from this permit's issuance date.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.754 & 60.757]

- 2) The Permittee shall semiannually calculate the VOC emissions from the landfill using the AP-42 landfill air emissions estimation procedure using AP-42 default values for the methane generation rate constant (k), the methane generation potential (L_0), and the landfill gas VOC concentration (C_{VOC}) in effect at the time the report is prepared (or other calculation method pre-approved in writing by the Division). The calculation shall include emissions from the previous six-month period, based on actual waste in place, and projected emissions for the next one-year period, based on projected waste receipts and reflecting existing and anticipated contracts. The Permittee shall submit a report of VOCs and supporting documentation to the Division, Attn: Large Sources Compliance Supervisor, no later than 30 days after the end of each six-month period starting from this permit's issuance date.

[County Requirement - County Rule 241] [Locally Enforceable only]

- 3) Following completion of the Tier 2 testing (if opted for) and approval by the Division of the site-specific value for C_{NMOC} in accordance with Permit Condition 20.C, the Permittee may annually calculate the NMOC emissions from the landfill using the NSPS Tier 2 equations and the actual landfill gas C_{NMOC} value determined by the Tier 2 testing. The calculation shall be made using the NSPS default values for k and L_0 and the Tier 2 landfill gas C_{NMOC} value. The NMOC emission report shall be prepared in accordance with the requirements of 40 CFR 60.757(b) and shall be submitted to the USEPA and to the Division, Attn: Large Sources Compliance Supervisor, within 30 days of the end of each calendar year starting from this permit's issuance date.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.754]

- 4) Following completion of the Tier 2 testing (if opted for) and approval by the Division of the site-specific value for C_{VOC} in accordance with

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Permit Condition 20.C, the Permittee shall semiannually calculate the VOC emissions from the landfill using the AP-42 landfill air emissions estimation procedure using AP-42 default values for the methane generation rate constant (k) and the methane generation potential (L_0) in effect at the time the report is prepared and the actual landfill gas C_{VOC} value determined by the Tier 2 testing (or other-calculation method pre-approved in writing by the Division). The calculation shall include emissions from the previous six-month period, based on actual waste in place, and projected emissions for the next one-year period, based on projected waste receipts and reflecting existing and anticipated contracts. The Permittee shall submit a report of VOCs and supporting documentation to the Division, Attn: Large Sources Compliance Supervisor no later than 30 days after the end of each six-month period starting from this permit's issuance date.

[County Requirement - County Rule 241] [Locally Enforceable only]

- 5) Following completion of the Tier 3 testing (if opted for) and approval by the Division of the site-specific value for (k) in accordance with Permit Condition 20.D, the Permittee may annually calculate the NMOC emissions from the landfill using the NSPS Tier 3 equations and the actual methane generation rate constant (k) determined by the Tier 3 testing. The calculation shall be made using the NSPS default value for L_0 , either the NSPS default value for C_{NMOC} or the Tier 2 C_{NMOC} value, and the Tier 3 methane generation rate constant (k). The NMOC emission report shall be prepared in accordance with the requirements of 40 CFR 60.757(b) and shall be submitted to the USEPA and to the Division, Attn: Title V Compliance Supervisor, within 30 days of the end of each calendar year starting from this permit's issuance date.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.754]

- 6) Following completion of the Tier 3 testing (if opted for) and approval by the Division of the site-specific value for (k) in accordance with Permit Condition 20.D, the Permittee shall semiannually calculate the VOC emissions from the landfill using the AP-42 landfill air emissions estimation procedure and the actual methane generation rate constant (k) determined by the Tier 3 testing (or other-calculation method pre-approved in writing by the Division). The calculation shall be made using the AP-42 default value for the methane generation potential (L_0), either the AP-42 default value for C_{voc} or the Tier 2 C_{voc} value, and the Tier 3 methane generation rate constant (k). The calculation

shall include emissions from the previous six-month period, based on actual waste in place, and projected emissions for the next one-year period, based on projected waste receipts and reflecting existing and anticipated contracts. The Permittee shall submit a report of VOCs and supporting documentation to the Division, Attn: Large Sources Compliance Supervisor no later than 30 days after the end of each six-month period starting from this permit's issuance date.

[County Requirement - County Rule 241] [Locally Enforceable only]

- 7) If the VOC emissions exceed 23 tons per year using the calculation procedures in Permit Conditions 22.B.2, 22.B.4, or 22.B.6, whichever results in the lowest emission estimate, unless the facility applies BACT, the Permittee shall submit reports to the Division, Attn: Large Sources Compliance Supervisor of VOC emissions on a monthly basis, no later than 15 days after the end of each calendar month starting from this permit's issuance date.

[County Requirement - County Rule 241] [Locally Enforceable only]

C. Source-Specific Excess Emissions Reports

The Permittee shall prepare and submit to the Division, Attn: Large Sources Compliance Supervisor, excess emission reports including opacity readings demonstrating exceedance of the opacity standards in accordance with the requirements of 40 CFR 60.757(f) within 30 days of the end of each calendar year starting from this permit issuance date.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.757]

D. Odor Monitoring:

The Permittee shall submit the records for any property line H₂S monitoring required by Permit Condition 20.B and summary of the odor complaint log if any complaints were received during the reporting period to the Division, Attention: Large Source Compliance Supervisor, within five business days of the completion of the required monitoring.

[Federal Requirement (EPA Interim Approval) - County Rule 210]

E. Cold Solvent Cleaner

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Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor containing the current list, total solvent usage records of the solvents and a summary of the inspections records during the reporting period showing problems found and corrective actions taken.

[Federal Requirement (EPA Interim Approval) - County Rule 210 § 302.1.e.(1)]

F. Gasoline Storage Tank

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor containing the following information:

- 1) Monthly and 12 month rolling total records of the gasoline delivered;
- 2) Records of the inspections of the submerged fill pipe required by these Permit Conditions;
- 3) Semiannual VOC emissions using the AP-42 organic liquid storage tank emission estimation procedure and the semiannual gasoline throughput for the storage tank.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

G. Stationary Internal Combustion Engines

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor containing the semiannual records of engine operating hours, reason for operating and emissions for the standby generator engine and the water pump engine. The Permittee shall calculate and report semiannual NO_x, CO, VOC, PM₁₀, and SO₂ emissions for the standby generator engine and the water pump engine using AP-42 emissions factors for industrial Diesel engines, the maximum horsepower rating of the engines, and the semiannual hours of operation.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

H. Waste acceptance rate exceedance

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Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor containing dates when the maximum potential waste acceptance rate was exceeded and a reason for accepting the additional amount of waste.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

I. Opacity Monitoring for Internal Combustion Engines

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor containing records of opacity reading higher than 0% taken in accordance with the requirements of Permit Condition 20A.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

J. Dust Control Plan:

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor explaining any deviation from the approved Dust Control Plan and reason for that deviation.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

K. Material Containment

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month period to the Division with attention to: Large Sources Compliance Supervisor listing dates when the requirements of the Permit Condition 19 F regarding daily cover were not followed, reason for non-compliance and description of alternative actions taken.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

L. Gasoline Contaminated Soil

Starting from this permit's issuance date the Permittee shall file a semiannual compliance report within 30 days of the end of the six-month

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period to the Division with attention to: Large Sources Compliance Supervisor listing dates when the requirements of the Permit Condition 19 H were not followed, reason for non-compliance and description of alternative actions taken.

[Federal Requirement (EPA Interim Approval) - Rule 210 § 302.1.e.(1)]

23. OTHER

Landfill Gas Collection and Control System Plan

- a) On or before the earliest of (a) the date the landfill's VOC emissions rate equals or exceeds 20 tons per year or (b) the date the NMOC emissions exceed 50 megagrams per year, when calculated in accordance with Permit Condition 22.B, the Permittee shall submit to the USEPA and to the Division: (1) design plans and specifications and an installation schedule for an active landfill gas collection and control system; and (2) an application for a modification to this permit. The landfill gas collection and control system shall meet the BACT requirements of Maricopa County Rule 241 and the requirements of 40 CFR Part 60 Subpart WWW.

[County Requirement - County Rule 241] [Federal Requirement - 40 CFR 60.754]

- b) The design plan shall include the site-specific operational standards, test methods, procedures, compliance measures, monitoring, record keeping, and reporting provisions as described in 60.753 through 60.758. To the extent allowable under 40 CFR 60 Subpart WWW, the design plans may, if necessary, include any alternatives to the standards provided in 60.753 through 60.758.

[County Requirement - County Rule 360] [Federal Requirement - 40 CFR 60.753, 60.754, 60.755, 60.756, 60.757, 60.758]

**Title V Engineering Evaluation
Southwest Regional Landfill**

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Attachment 1: EPA Landfill Air Emissions Estimation Model - VOC Emissions
Attachment 2: EPA Landfill Air Emissions Estimation Model - HAPs Emissions
Attachment 3: EPA Landfill Air Emissions Estimation Model - NMOC Emissions
Attachment 4: Gasoline Storage Tank Emission Calculations
Attachment 5: Leachate Storage Emission Calculations
Attachment 6: Stationary I/C Engine Emission Calculations
Attachment 7: Proposed Draft Specific Permit Conditions

I. ENGINEERING EVALUATION

Facility Name: Southwest Regional Landfill
24427 South Highway 85
Buckeye, Arizona
Location: Latitude 33E13=30@ north
Longitude 112E38=38@ west

Applicant: Allied Waste Industries (Arizona), Inc.

Responsible Official: Pete Keller, P.E.
Environmental Manager
(602) 596-9596

Contact: Pete Keller, P.E.
Environmental Manager
(602) 596-9596

Mailing Address: 7210 E. Camelback Road, Suite 375
Scottsdale, AZ 85251

Allied Waste Industries (Arizona), Inc., operates a regional municipal solid waste landfill near the town of Buckeye. The landfill accepts municipal solid waste, including household waste, from homes and businesses; construction debris; and asbestos. Waste is delivered to the landfill primarily by truck. No hazardous or radioactive waste is accepted at the landfill; burning of waste is not allowed.

The landfill has a capacity of approximately 28 million cubic yards of waste and is expected to accept waste for approximately 30 years. Auxiliary equipment at the landfill includes one 500-gallon unleaded gasoline storage tank and four Diesel storage tanks ranging in size from 300 to 6,000 gallons for dispensing fuel into motor vehicles operating at the landfill; a 315-horsepower Diesel standby generator engine and a 225-horsepower leachate pump engine. The construction and operation of a landfill gas collection and control system is not authorized under this permit.

A. Emissions Sources

1. Landfill Activities

The landfill accepts and disposes of municipal solid waste. Solid waste is delivered to the site by truck and deposited into the landfill. Deposited waste is compacted by heavy equipment. Soil from adjacent storage piles is transported to the site to be used for daily cover. In addition, facility operations will include the excavation of future disposal cells and intermediate and final cover activities. These landfill activities have the potential for

generating fugitive dust emissions due to soil excavation, wind erosion of disturbed surfaces, and travel on paved and unpaved surfaces. Fugitive dust emissions will be minimized through the implementation of control measures that include prewetting excavation areas to suppress fugitive dust during construction and general operations; constructing gravel, compacted soil, or asphalt roads and watering unpaved roads to minimize dust generation from vehicle operations; monitoring and sweeping or vacuuming asphalt surfaces to prevent material track-out; applying chemical stabilizers and/or water to disturbed surfaces to suppress fugitive dust during landfill operations; and tarping trucks carrying bulk materials to prevent generation of fugitive dust from material transport. The County has reviewed and approved a Dust Control Plan for the operations at the facility, and the Plan requires the applicant to minimize fugitive dust emissions from the landfill and to implement the reasonably available dust control measures in the approved dust control plan. The Dust Control Plan is incorporated into this permit. Combustion emissions will also be associated with the operation of Diesel landfill equipment including scrapers, compactors, and loaders. Because dust and combustion emissions associated with landfill equipment are fugitive in nature and are classified as insignificant under the Title V regulations, these emissions are not included in the facility emissions total.

2. Gaseous Emissions from the Landfill

Biodegradation of the disposed refuse will generate methane, carbon dioxide (CO₂), volatile organic compounds (VOC), nonmethane organic compounds (NMOC), and hazardous air pollutants (HAP). The quantities of these emissions depend upon the quantity and type of waste deposited, ambient temperature and humidity, rainfall, and other factors. Landfill gas emissions have been predicted using EPA's landfill air emissions estimation model and information provided by the applicant regarding waste acceptance rates. The model contains default values that must be used under some circumstances; user-defined values may also be used. Two sets of default values were used to estimate landfill gas emissions and determine compliance with two different sets of applicable requirements. These applicable requirements and calculation methods are discussed in more detail below.

While the Maricopa County rules regulate the emissions of VOCs, the federal New Source Performance Standard (NSPS) for landfills regulates the emissions of NMOCs. Total NMOCs include some compounds that are not included in total VOCs (i.e., ethane). To calculate VOC emissions, the EPA landfill air emission estimation model was used based on default values in the EPA's Compilation of Air Pollutant Emission Factors (AP-42). NMOC emissions were calculated using the EPA landfill air emission estimation model based on the defaults allowed in the NSPS for landfills.

As described above, gaseous emissions from the landfill result from biodegradation of the disposed refuse. Until refuse has been in place for some period of time, the quantity of landfill gas generated will not be adequate to support combustion in a flare, boiler, or internal combustion engine. This is not expected to occur for a number of years depending on the actual waste acceptance rate of the landfill. Because of the nature of landfill operations, the landfill will initially be permitted to accept and dispose of waste without installing a landfill gas collection and control system. However, by the time the quantity of waste in place reaches the point when the emissions from the landfill reach 25 tons per year of VOC or 50 megagrams per year of NMOC, the landfill gas generation is expected to be adequate to justify the installation and operation of a landfill gas collection and control system. Therefore, a landfill gas collection and control system must be installed prior to when VOC emissions reach the Rule 241 25 tons per year BACT threshold. If VOC emissions are well below the Rule 241 BACT threshold but NMOC emissions exceed 50 megagrams per year, as required by the NSPS for landfills a landfill gas collection and control system plan must be submitted to the District and EPA within one year for review and approval. In addition, a landfill gas collection and control system must be installed and operated within 18 months of the submittal of the plan. Prior to the installation of the landfill gas collection and control system, the applicant must submit a permit application to modify the Title V permit to allow for the installation of the landfill gas collection/control system. This system must meet the BACT requirements of County rules and the design and performance requirements of the NSPS for landfills. After the permitting, installation, and operation of the landfill gas collection/control system, the landfill will then be allowed to accept waste up to its total design capacity.

a. County Rule 241: Permits for New Sources and Modifications to Existing Sources

Maricopa County Rule 241 requires the use of BACT for new or modified non-major sources when emissions exceed threshold limits set forth in the rule. The EPA landfill air emissions estimation model has been used with the following input parameters to project future VOC emissions for purposes of determining compliance with this applicable requirement:

<p>Table 1 Landfill Modeling Parameters for Determining Compliance with Rule 241</p>			
Parameter	Value	Units	Source
k	0.02	methane generation rate constant, yr ⁻¹	AP-42 default value* for arid areas
L _o	100	methane generation potential, m ³ CH ₄ /Mg refuse	AP-42 default value*
C _{VOC}	235	VOC concentration in landfill gas, ppmv	AP-42 default value*
* "Compilation of Air Pollutant Emission Factors," EPA OAQPS, Section 2.4, 9/97.			

Based on these default model input assumptions, the landfill is expected to emit 25 tons/yr of VOCs once there are approximately 9 million tons of waste in place in the landfill. The period of time for this emission rate to be reached will vary depending on

the rate at which waste is received into the landfill. At the applicant's worst-case estimated waste acceptance rate of 2,500 tons/day beginning in 1999, the landfill would reach the 25 tons/yr VOC emission rate level by approximately the year 2011. Methane and VOC emissions predicted by the EPA's landfill air emissions estimation model for this waste acceptance rate are shown in Attachment 1.

The initial estimate of VOC emissions based on default values may, as an option, be refined using site-specific data once these data are collected. The permit requirements for collecting and using the site-specific data are described in more detail in the following sections.

The EPA landfill air emissions estimation model also contains default values for concentrations of HAPs and other noncriteria air pollutant emissions, which can be used to calculate emissions of these pollutants from the operation of the landfill. Like total VOC emissions, noncriteria pollutant emissions are also dependent on the values used in the model and the waste acceptance rate. These emissions are based on total landfill gas emissions, so maximum allowable HAP emissions from the project can be estimated based on the total volume of landfill gas emissions when VOC emissions reach approximately 25 tons/yr. Calculation of allowable HAP emissions allowed prior to the installation of the landfill gas collection and control system is shown in Attachment 2 and are summarized in Table 2.

Table 2 Maximum Allowable HAP Emissions Southwest Regional Landfill	
Compound	Emissions (tons/yr)
1,1,1-trichloroethane	0.077
1,1,2,2-tetrachloroethane	0.223
1,1-dichloroethane	0.278
1,1-dichloroethene	0.023
1,2-dichloroethane	0.048
1,2-dichloropropane	0.024
acrylonitrile	0.401
benzene	0.178
carbon disulfide	0.053
carbon tetrachloride	0.001
carbonyl sulfide	0.035
chlorobenzene	0.034
chloroethane	0.096
chloroform	0.004
chloromethane	0.073
dichlorobenzene	0.037
dichloromethane	1.452
ethylbenzene	0.585
ethylene dibromide	0.000
hexane	0.677
mercury (total)	0.000
methyl ethyl ketone	0.611

Table 2 Maximum Allowable HAP Emissions Southwest Regional Landfill	
Compound	Emissions (tons/yr)
methyl isobutyl ketone	0.224
perchloroethylene	0.739
toluene	4.328
trichloroethene	0.443
vinyl chloride	0.548
xylene	1.535
Total =	12.73

b. 40 CFR Part 60, Subpart WWW: Standards of Performance for Municipal Waste Landfills

The NSPS for landfills requires the design, installation, and operation of a landfill gas collection system within 30 months of the time the landfill emits 50 megagrams (or approximately 55 tons) per year of NMOCs. The NSPS requires the use of the EPA landfill air emission estimation model with specific default values for determining compliance with this requirement. These NSPS default values are shown in Table 3 and result in calculated landfill gas generation rates that are significantly higher than those used for evaluating compliance with the Rule 241 BACT requirement. The NSPS allows the landfill owner or operator to perform testing to develop site-specific values for NMOC concentration and methane generation rates to improve the accuracy and representativeness of the emissions estimates. The permit requirements for collecting and using the site-specific data are described in more detail in the following sections.

Table 3 Landfill Modeling Parameters for Determining Compliance with NSPS			
Parameter	Value	Units	Source
k	0.02	methane generation rate constant, yr ⁻¹	NSPS default value * for arid areas
L ₀	170	methane generation potential, m ³ CH ₄ /Mg refuse	NSPS default value *
C _{NMOC}	4,000	NMOC concentration in landfill gas, ppmv	NSPS default value *
* Based on 40 CFR 60.754 revised pursuant to 63 FR 32743, June 16, 1998.			

Based on these default model input assumptions, the landfill is expected to emit 50 megagrams per year of NMOC once there are approximately 0.6 million tons of waste in place in the landfill. The period of time for this emission rate to be reached will vary depending on the rate at which waste is received into the landfill. At the applicant's worst-case estimated waste acceptance rate of 2,500 tons/day beginning in 1999, the landfill would reach the 50 megagrams per year NMOC emission rate level by the year

2000. Methane and NMOC emissions predicted by the EPA landfill model for this waste acceptance rate are shown in Attachment 3.

3. Fuel Storage Tanks

Fuel for facility vehicles is stored in five on-site fuel storage tanks. Gasoline is stored in a horizontal, above-ground, fixed-roof 500 gallon tank. Diesel fuel is stored in one 6,000 gallon, two 1,000 gallon, and one 300 gallon horizontal, fixed-roof, above-ground, storage tanks. Gasoline throughput will be limited to 12,352 gallons per year to limit VOC emissions. VOC emissions for the gasoline storage tank were calculated using EPA=s TANKS3 model (Version 3.1). The TANKS3 calculations for the gasoline storage tank are included in Attachment 4. There will also be small quantities of VOC emissions from vehicle tank filling activities. For gasoline, these emissions were estimated using emission factors from EPA=s AP-42 emission factor, Table 5.2-7, 1/95. Due to the low vapor pressure of Diesel fuel, the Diesel fuel storage tanks are classified as insignificant emission sources. Consequently, the emissions for these tanks are not included in the facility emission summary.

VOC emissions from the gasoline storage tank and related activities are summarized in Table 4.

Table 4 VOC Emissions from Gasoline Storage Tank and Related Activities	
Tank/Activity	VOC Emissions (tons/yr)
Gasoline storage	0.2
Vehicle refueling	0.1
Total =	0.3

4. Leachate Storage

Leachate collected from the landfill is stored in an onsite evaporation pond. The maximum throughput to the pond is estimated to be approximately 5.6 million gallons per year. VOC emissions from the leachate storage pond are based on the assumption that all of the hydrocarbons in the leachate evaporate into the atmosphere. The hydrocarbon concentrations in the leachate are based on an analysis of the leachate provided in the permit application. These emission calculations are included as Attachment 5.

5. Stationary Internal Combustion Engines

The facility includes a 315-horsepower Diesel standby generator engine to provide power in the event of a utility power failure. In addition, the facility includes a 225-horsepower Diesel leachate pump engine. To limit the combustion emissions from these engines, the standby generator engine is limited to 500 hours per year of operation and the leachate

pump engine is limited to 2,944 hours per year. Combustion emissions were calculated using AP-42 emission factors. These emission calculations are included as Attachment 6.

6. Summary of Project Potential to Emit

The maximum allowable emissions from each significant source at the facility and total facility emissions are shown in Table 5.

Table 5 Maximum Allowable Criteria Pollutant Emissions for Southwest Regional Landfill					
Emissions Source	Criteria Pollutant Emissions (tons/yr)				
	NO _x	SO ₂	CO	VOC	PM/PM ₁₀
Landfill	--	--	--	23.6	--
Stationary Engines	12.7	0.8	2.8	1.0	0.9
Leachate Storage	--	--	--	0.0	--
Gasoline Storage Tank	--	--	--	0.3	--
Total	12.7	0.8	2.8	24.9	0.9

B. Compliance with Applicable Requirements

The attached Table 6 lists all applicable requirements for the project, and indicates whether the requirements are County Only or federally enforceable.

C. Non-Applicable Requirements

The facility is not subject to the requirements of Maricopa County Rule 240 or Prevention of Significant Deterioration (PSD) review under the SIP-approved county PSD rule (Rule 21.D). Federally enforceable permit conditions will limit the emissions from the facility to less than 250 tons per year of any pollutant and the facility is located in an attainment or unclassifiable area, so the facility will not be a major source.

D. BACT Requirements

Maricopa County Rule 241 requires the use of best available control technology (BACT) on new sources or modifications that have the potential to emit or to increase emissions above amounts specified in the rule. This permit contains federally enforceable emissions limitations that will ensure that the emissions from the project remain below the BACT thresholds unless and until BACT is applied to the landfill.

E. Insignificant Activities

The following potential activities at the landfill qualify as insignificant activities under the Title V regulations pursuant to Maricopa County Rule 200, Section 303.3(c).

- Fugitive dust from the operation of motor vehicles, if proper dust control measures are applied
- Emissions from routine maintenance and repair including brazing and welding equipment
- Activities associated with the construction, on-site repair, maintenance, or dismantling of buildings; control equipment; utility lines; pipelines; well excavation; electrical structures; and miscellaneous processes except construction or dismantling of asbestos-containing structures
- Comfort heating having individual or aggregate heat input capacity below the thresholds in Rule 200, Section 303.3(c)(1)
- Battery recharging
- Impoundments, such as storm water retention ponds
- Safety equipment such as fire extinguishers
- General vehicle maintenance and servicing activities, except vehicle repainting and solvent cleaning activities subject to the requirements of Rules 336 and 345
- Circuit breakers
- Engines used to propel motor vehicles
- Use of pesticides, fumigants, and herbicides
- Restroom facilities and sewer gas vents
- All office equipment such as white-out, adhesives, printer and copier toner, etc.
- Acid and solvent storage cabinets
- Air compressors, provided any internal combustion engines have a manufacturer's maximum continuous rating that do not exceed the thresholds in Rule 200, Section 303.3(c)(5)(a)
- Piping systems for fuel
- Storage and handling of drums or other transportable containers where the volume of the container does not exceed five gallons and the containers are sealed during storage and transport
- Transportation of waste materials
- Smoking areas
- Sealed air conditioning and cooling equipment servicing and use, as long as servicing is not subject to Title VI requirements; sealed hydraulic systems servicing and use
- Transferring chemicals from larger to smaller containers; transferring chemicals from smaller to larger containers
- Health services activities (first aid, nursing, medical, etc.)
- Soil gas and groundwater sampling
- The gasoline storage tank is exempt from the vapor recovery requirements of Rule 353 because the annual tank throughput will be limited to 120,000 gallons per year by a federally enforceable permit condition
- Solvent cleaning equipment with an open surface area of 10.8 square feet or less
- Storage tanks used for storing organic liquids with a true vapor pressure of 1.5 psia or less

F. Alternative Operating Scenarios

There is only one operating scenario for the landfill. No alternative operating scenarios have been requested or approved.

II. SPECIFIC PERMIT CONDITIONS

Enclosed as Attachment 7 are the draft specific permit conditions that are proposed to ensure that the landfill operations comply with all applicable requirements discussed above.

Insert Table 6 - Applicable Regulations

Attachment 1

EPA Landfill Air Emissions Estimation Model - VOC Emissions

Attachment 2

EPA Landfill Air Emissions Estimation Model - HAPs Emissions

Attachment 3

EPA Landfill Air Emissions Estimation Model - NMOC Emissions

Attachment 4

Gasoline Storage Tank Emission Calculations

Attachment 5

Leachate Storage Emission Calculations

Attachment 6

Stationary I/C Engine Emission Calculations

Attachment 7

Proposed Draft Specific Permit Conditions